CLAIMS

What is claimed is:

1. Use of a replication competent herpes virus which
   (a) lacks a functional wild-type HSV ICP27 gene; and
   (b) comprises a nucleic acid encoding an ICP27 protein, or a functional equivalent thereof from a non-HSV herpes virus,which allows replication of said herpes virus to occur and which has a reduced ability to inhibit RNA splicing compared to wild-type HSV ICP27
   in the production of an adeno-associated virus (AAV) vector.

2. Use according to claim 1 wherein said herpes virus is HSV-1 or HSV-2.

3. Use according to claim 1 or 2 wherein said ICP27 protein is a functional equivalent of ICP27 from a non-HSV herpes virus.

4. Use according to claim 3 wherein said functional equivalent is mutated.

5. Use according to any one of the preceding claims wherein said ICP27 protein is a mutant HSV ICP27 protein.

6. Use according to claim 5 wherein the mutant protein is an HSV ICP27 protein comprising an R480H/V496I double mutation.

7. Use according to any one of the preceding claims wherein the herpes virus is not an HSV which further lacks its wild-type functional equivalent of the HSV ICP27 gene.

8. Use according to any one of the preceding claims wherein the herpes virus further comprises AAV rep and cap genes.

9. Use according to any one of the preceding claims wherein the herpes virus further comprises an AAV vector sequence.

10. Use according to claim 8 or 9 wherein said AAV rep and cap genes and/or said AAV vector sequence are inserted into the UL43 locus, US5 locus or LAT locus of said herpes virus.

11. A replication competent herpes virus as defined in any one of claims 8 to 10.

12. A method of producing an AAV vector comprising:

(i) introducing into producer cells:

(a) a herpes virus which lacks a functional wild-type HSV ICP27 gene;

(b) comprises a nucleic acid encoding an ICP27 protein, or a functional equivalent thereof from a non-HSV herpes virus, which allows replication of said herpes virus to occur and which has a reduced ability to inhibit RNA splicing compared to wild-type HSV ICP27;

(c) AAV rep and cap genes; and

(d) an AAV vector sequence; and

(ii) isolating the AAV vector particles produced.

13. A method according to claim 12 wherein said herpes virus (a) comprises said nucleic acid (b).

14. A method according to claim 12 wherein said nucleic acid (b) is stably or transiently infected into said producer cells.

15. A method according to any one of claims 12 to 14 wherein said AAV rep and cap genes (c) and/or said AAV vector sequence (d) are inserted into said herpes virus (a).

16. A method according to claim 15 wherein said AAV rep and cap genes (c) and/or said AAV vector sequence (d) are inserted into the UL43 locus, US5 locus or LAT locus of said herpes virus.

17. A method according to any one of claims 12 to 14 wherein said AAV rep and cap genes and/or said AAV vector sequence (d) are stably or transiently transfected into said producer cells.

18. A method according to claim 14 or 17 wherein said producer cells are stably transfected prior to infection with said herpes virus (a).

19. A method according to claim 14 or 17 wherein said producer cells are transiently transfected before infection with said herpes virus (a).

20. A method according to claim 14 or 17 wherein said producer cells are transiently transfected after infection with said herpes virus (a).

21. A method according to any one of claims 12 to 17 wherein the producer cells are BHK or Vero cells.

22. An AAV vector produced by a method of any one of claims 12 to 21.

23. A pharmaceutical composition comprising an AAV vector according to claim 20 and a pharmaceutically acceptable carrier or diluent

24. A method of producing a pharmaceutical composition comprising mixing an AAV vector according to claim 22 with a pharmaceutically acceptable carrier or diluent.

25. A method of producing a pharmaceutical composition comprising carrying out the method of any one of claims 12 to 21 and formulating said isolated AAV vector particles with a pharmaceutically acceptable carrier or diluent.

26. A method of gene therapy comprising administering a therapeutically effective amount of an AAV vector according to claim 22 to a patient in need thereof.

27. A kit for producing an AAV vector comprising:

(a) a replication competent herpes virus which lacks a functional wild-type HSV ICP27 gene;

(b) a nucleic acid encoding an ICP27 protein, or a functional equivalent thereof from a non-HSV herpes virus, which allows replication of said herpes virus to occur and which has a reduced ability to inhibit RNA splicing compared to wild-type HSV ICP27;

(c) AAV rep and cap genes;

(d) an AAV vector sequence; and optionally

(e) producer cells

wherein said nucleic acid (b), said AAV rep and cap genes (c) and/or said AAV vector sequence (d) are incorporated into said herpes virus (a), are present on separate plasmids or are stably integrated into said producer cells (e).